

REMARKS

Claims 12-22 were considered in the Office Action mailed October 10, 2007. The following rejections were entered:

- Claim 12 stands rejected under 35 U.S.C. § 112, second paragraph, as indefinite for use of the word “their.”
- Claims 14-17 stand rejected under § 112, second paragraph, as indefinite due to antecedent basis issues.
- Claim 18 stands rejected under § 112, second paragraph, as unclear regarding the meaning of the phrase “means for detachable mounting fasten secure the chipping blade,” and regarding what is meant by “the knife.” Claim 23 is identified as also affected by the latter issue.
- Claims 12 stands rejected under 35 U.S.C. § 102(b) as anticipated by U.S. Patent No. RE 36,659 to Toogood (“Toogood”).
- Claims 15 and 16 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Toogood.

The following addresses each of the pending objections and rejections.

1. **The § 112 Rejections Have Been Addressed.** The Applicant has amended the claims as follows to address each of the § 112 issues:

Claim 12 has been amended to replace the “their” with specific recitations, without changing claim scope; as amended, the limitation reads: “means for detachable mounting of the chipping knife on the chipping knife mounting face and the slabbing knife on ~~their respective holder body~~ the slabbing knife mounting face ~~faces~~.”

Claim 14 has been amended to refer to “~~the direct fastening~~ means for detachable mounting.”

Claims 15 and 16 have been amended to identify the slabbing knife as “the knife,” consistent with the description of the horizontal projection at ¶ [0034] of

the clean substitute specification (“In the horizontal projection in FIG 2 perpendicular to the plane of the slabbing knife 5, the effective cutting edges 5a, 7a of the slabbing knife 5 and the chipping knife 7 form an angle α which amounts to approx. 159° in the example shown here and may have a different value between 130° and 230° as needed in the alternative exemplary embodiments.”).

Claim 17 has been amended to eliminate any ambiguity as to whether a particular one or both knife mounting faces is being identified, by reciting: “wherein holder fastening means are provided laterally next to at least one of the knife mounting faces of the knife holder.”

With respect to the first issue identified in claim 18 regarding the meaning of the phrase “means for detachable mounting fasten secure the chipping blade,” the Applicant has deleted the word “secure” which was inadvertently retaining in the previous amendment. Claim 18 now uses terminology consistent with that used in claim 12.

With respect to the second issue identified in claim 18, the Applicant notes that claim 18 does not positively recite the presence of both the chipping knife *and* the slabbing knife, but rather recites a knife, which may be *either* the chipping knife or the slabbing knife, and proceeds to describe the knife (whether chipping or slabbing) as having particular arrangements. The Applicant respectfully submits that one of ordinary skill, reading claim 18 in the context of the Specification and drawings as required, would discern no ambiguity in what is claimed, and thus this aspect of claim 18 is sufficiently definite for § 112

purposes. As a separate matter, the Applicant has addresses the issue regarding “a knife” in line 22 by amendment to recite “[a] the at least one knife cutting edge.” The foregoing remarks are similarly applicable to claim 23, which has been amended to recite that the particular knife being referred to may be *either* the chipping or the slabbing knife: “wherein the at least one of the chipping knife and the slabbing knife on each first knife holder has at least one knife cutting edge.”

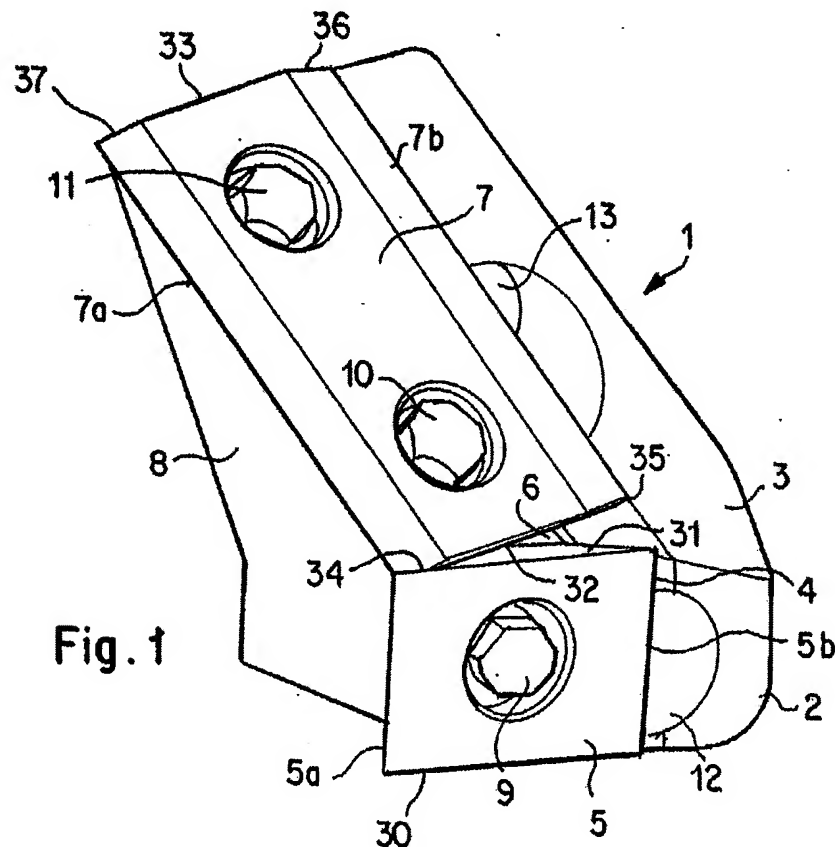
In view of the foregoing, the Applicant respectfully submits the pending § 112 issues have been addressed, and requests reconsideration and withdrawal of the pending § 112 rejections.

2. The Claims Are Patentable Over Toogood. The Applicant respectfully traverses the rejection of the pending claims as anticipated by, or obvious in view of, the Toogood reference, for essentially the same reason as these claims were patentable over the previously cited Carpenter reference, *i.e.*, the Toogood blades are arranged such that as the blades wear, a gap forms between the chipping and slabbing blades.

The Present Invention: For the Examiner’s convenience of reference, the following repeats the Applicant’s description of the invention recited in the pending claims:

The present invention is directed to a blade holder, blade and blade tool head which utilizes a novel direct-mounting technique which greatly simplifies cutting tool design and maintenance (*e.g.*, providing rapid and easy mounting, with a highly repeatable position accuracy), and provides superior cutting

performance by eliminating the generation of debris-clogging gaps between cutting blades as the cutting blades wear during use. *See, e.g.,* Specification ¶ [0010]. As shown in the copy of Fig. 1 below, chipping and slabbing knife blades 5, 7 are directly mounted onto knife holder 2, which in turn is detachably fastened directly to the tool head via fasteners 12, 13, and the knife blades have edges which have complementary angles and meet at contact areas 34 in such a way that, *as the knife blade cutting edges wear, the adjacent blades remain in contact, so that no debris-capturing gap forms between the edges*, as was common in the prior art. *Id.* ¶¶ [0010], [0015], [0032]-[0038].

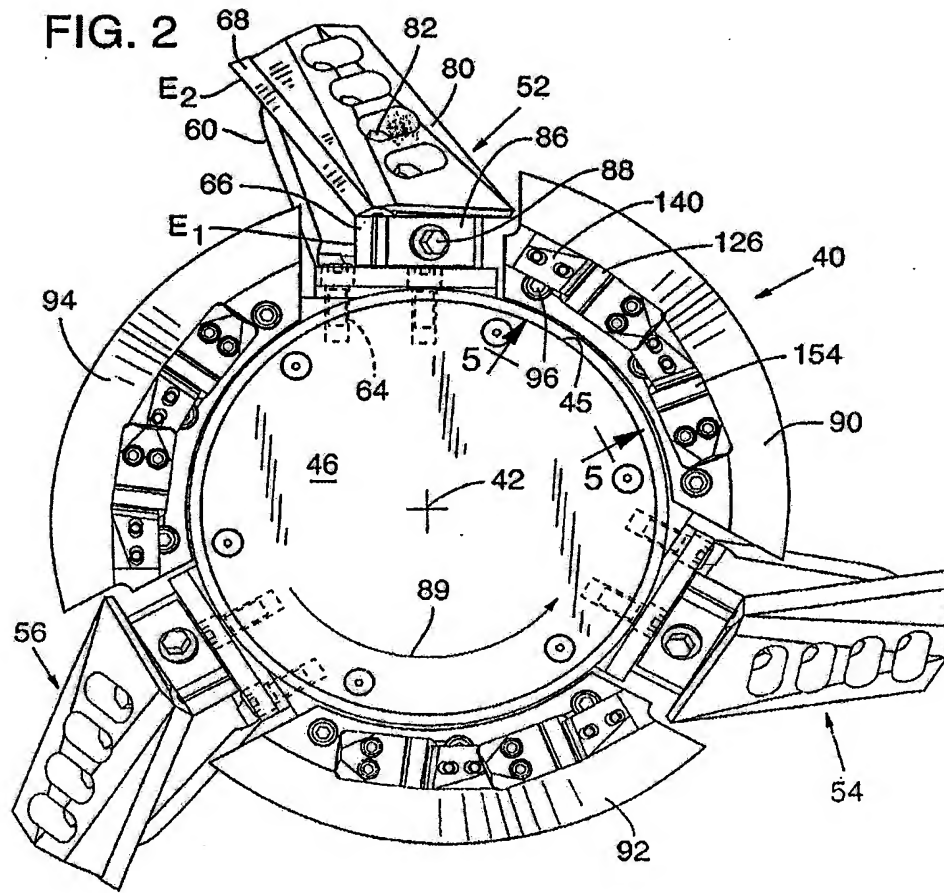


The Toogood Reference: Turning to Toogood, as a first background matter the Applicant notes that Toogood is a further development of the invention presented in the previously cited Carpenter reference, *i.e.*, Toogood and Carpenter are directed to the very same type of chipper, the assignees are related companies, and Toogood makes explicit reference to Carpenter with regard to the principle construction of the chipper. *See, e.g.*, Toogood at 3:1-3 and 16-62; 5:5-8. It can be seen from the figures that especially the knife holder 60 of Toogood is of nearly identical type as the Carpenter knife holder 46.

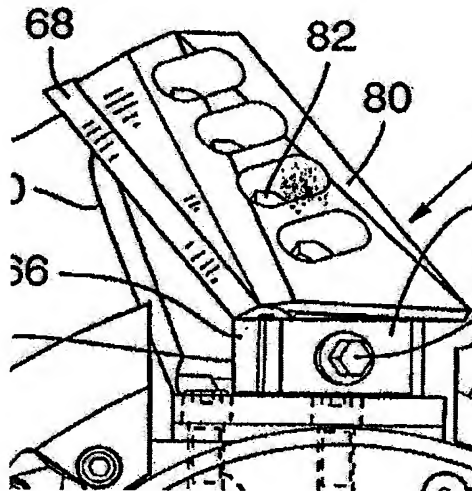
Referring now to the Toogood disclosure, the pending Office Action includes a reduced-size copy of Toogood Fig. 3, with an annotation which states that “Chipping and Slabbing knives abutting each other on a V-Shaped incline such that no gap results between the knives.” October 10, 2007 Final Office Action at 4.

As noted at Toogood 3:4-6, Figs. 2, 3 and 4 provide different views of the same chipping head 40. While the full-size rendering of Fig. 3 in the Toogood patent publication shows the geometry of the chipping and slabbing blades interface (which, like Carpenter, starts with blade edges with no gap at their front edges, but wear in a manner which soon creates a problem-inducing gap), the Fig. 2 end view (as opposed to the Fig. 3 perspective view) provides a considerably clearer illustration of the chipping and slabbing blades’ arrangements.

Shown below are two illustrations: a complete view of Fig. 2 to place the following magnified illustration into context, and a view of one of the blade holders which shows the gap-forming arrangements of the Toogood blades.



The next drawing shows the top blade holder in Fig. 2 in greater detail:



The intersection of chipping blade edge 68 and slabbing blade edge 66 is consistent with (and indeed, is nearly *exactly*) the arrangements of Carpenter, with the very front tips of the blades' edges meeting, but as soon as wear begins, a gap between the edges begins to form. The Applicant notes that Toogood uses chipping blades that are rectilinear in shape, *i.e.*, cutting edges and sides which are at right angles to one another – in other words, the same blades as used in Carpenter. The Toogood disclosure does not contain any suggestion of any chipping or slabbing blade configuration with sides which are at an angle, or otherwise anything but at right angles to the blades' cutting edges, and thus no suggestion of the present invention's blade angle arrangements. Thus, like Carpenter, because the chipping blade edge 68 is displaced at an obtuse angle from the edge of the slabbing blade 66, as the blades' edges recede, a gap will open between the blades.

Accordingly, the Applicant submits that Toogood is representative of the prior art blade arrangements which suffer from the sort of clogging problems the present invention addresses, and that Toogood in fact does not disclose or suggest the claimed invention's blade edge arrangements in which "the chipping knife and the slabbing knife each having knife contact faces inclined in a V shape and arranged such that when mounted on the knives' respective holder body mounting faces, the knives' contact faces abut one another along the knives' respective inclined V shape contact faces such that no gap is formed between the contact faces as the knives' cutting edges wear."

As separate grounds of allowability, the Applicant notes that Toogood, like Carpenter, fails to disclose or suggest the present invention's mounting arrangements. Like Carpenter, Toogood's chipping and slabbing knives are mounted by being clamped through the use of a clamping element against a ridge of *rectangular* cross section of a holder assembly, the ridge mating with a channel or groove formed with corresponding rectangular cross-section in the respective knife, the ridge forming a respective holder contact face. In the present invention, the mounting faces associated with a corresponding knife to be mounted on the holder body have holder contact faces which are inclined with *V-shaped* cross-section.

Toogood also fails to disclose or suggest the use of the knife mounting means in the form of direct fastening as recited the present independent claims. Namely, just like the mounting blade arrangements of Carpenter from which Toogood is apparently derived, the recited means for detachable mounting means are required to have contact faces inclined in a V-shape *for each chipping and slabbing knife separately*. In contrast, each knife of Toogood has a channel of rectangular cross-section as knife contact faces, *i.e., not* inclined in a V-shape. Consequently, the holding force in the Toogood arrangement cannot act between the contact faces inclined in a V-shape, as required by the pending claims.

Finally, Toogood and Carpenter share a clamping knife mounting mechanism which is not "means for detachable mounting fasten the chipping knife and the slabbing knife *directly* on the knives' respective holder body mounting faces," as used in the present invention. Like the previously

distinguished Shantie and Carpenter references, Toogood uses a blade-clamping mechanism for supporting its knives, in which a separate, detachable component traps a knife blade against an underlying knife support. Also like the previously-cited references, in order to provide for stable knife positioning, the Toogood knife clamp has a knife-receiving protrusion of rectangular cross-section which cooperates with a corresponding groove in the knife to align the knife in a desired orientation. Thus, there is no direct fastening with the Toogood arrangements, and any screws used as fastening elements are provided *outside* the region of the clamped knife blade.

Because the Toogood reference fails to disclose or suggest several of the features of the present invention recited in the pending claims 12-23 are patentable over this reference under § 102(b) and § 103(a). Accordingly, requests reconsideration and withdrawal of the pending rejections is respectfully requested.

CONCLUSION

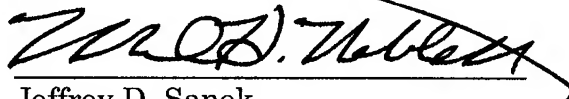
In view of the foregoing amendments and remarks, the Applicant submits that claims 12-23 are in condition for allowance. Early and favorable consideration and issuance of a Notice of Allowance for these claims is respectfully requested.

If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket #101643.55963US).

March 4, 2008

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Jeffrey D. Sanok", written over a horizontal line.

Jeffrey D. Sanok
Registration No. 32,169
Mark H. Neblett
Registration No. 42,028

CROWELL & MORING LLP
Intellectual Property Group
P.O. Box 14300
Washington, DC 20044-4300
Telephone No.: (202) 624-2500
Facsimile No.: (202) 628-8844
5008966_1